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ABSTRACT

The Mobile Teacher Program was designed to improve the social studies and science curricula in the Indian River School District, Delaware. The objective of the program for the 1973 fiscal year was to increase the skills of sixth-grade students in social studies and science a) by one grade level on a nationally standardized test compared to previous sixth-grade students who did not have such a program and b) by an average of 20 percent on teacher-made tests, on a pre- and post-test basis. To accomplish these objectives, eight teachers prepared a 9-week instruction program in a specific subject area, which they would teach at each of the four schools in the district. These programs were designed to meet several national objectives that included a) using interdisciplinary approaches in relation to basic content matter, b) increasing specific skills and concepts essential to social studies and science, c) involving students in related programs outside the school, d) providing more experiences and materials related to the wide ranges in ability and achievement, and e) improving the quality of teacher planning and instruction. The gain in most cases did not meet the expectations, and results were inconclusive. It is recommended that teachers remain stationary during the 1973-74 year and that only the materials and units be rotated since there seems to be difficulty in establishing a strong student-teacher relationship during a 9-week period. (PD)

ED 090228

I. IDENTIFYING INFORMATION

OUTCOME EVALUATION REPORT FY '73

PROJECT TITLE: Mobile Teacher

PERIOD OF EVALUATION: July 1, 1972 to June 30, 1973

NAME OF AGENCY: Indian River School District

ADDRESS OF AGENCY: Rt. 2, Box 236
Frankford, Delaware 19945

PROJECT DIRECTOR: Don Ward

DISTRICT SUPERINTENDENT: James M. Proudfoot

FUNDING AGENCY: Elementary and Secondary Education Act
of 1965, Title III, PL 89-10 as amended

DATE REPORT SUBMITTED: July 15, 1973

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II. BRIEF HISTORY AND GENERAL GOALS OF THE PROJECT

A. The "Mobile Teacher Program" was funded as a result of the Elementary and Secondary Education Act of 1965, Title III, PL 89-10 as amended.

B. The project was planned and made operational by various representatives from local and state educational agencies. These included: Mr. John Watson, Supervisor, ESEA Title III Planning, Department of Public Instruction; Mr. Leslie Timmons, Supervisor, Special Projects, Department of Public Instruction; Mr. William McCormick, Supervisor, Intermediate Education, Department of Public Instruction; Mr. Phillip Slacum, Assistant Superintendent, Indian River School District; Mr. Jack Hallman, Director of Curriculum, Indian River School District; Mr. Ralph Mahan, Supervisor of Science, Indian River School District; Mrs. Mary Phillips, Supervisor of Social Studies, Indian River School District; Mr. John Young, Federal Projects Coordinator, Indian River School District; Mrs. Martha Joines, Elementary Principal, Indian River School District; Mr. Edward Burton, Elementary Principal, Indian River School District; Mr. William Howlett, Elementary Principal, Indian River School District; Mr. Everett Toomey, Middle School Principal, Indian River School District; Mr. Byron Phillips, Elementary Principal, Indian River School District; Mr. James Blackwell Social

Studies Teacher, Indian River School District; Mrs. Jean Slacum, Social Studies Teacher, Indian River School Distirct; Mrs. Joanne Stephens, Social Studies Teacher, Indian River School Distirct; Mr. Thomas Timmons, Social Studies Teacher, Indian River School Distirct; Mr. Alex Kansak, Science Teacher, Indian River School District; Mrs. Martha Little, Science Teacher, Indian River School District; Mrs. Shirley Scott, Science Teacher, Indian River School District; Mr. Alphonso Stevenson, Science Teacher, Indian River School District.

C. Upon the consolidation of the Georgetown, Millsboro, John M. Clayton, Lord Baltimore, and Selbyville School Districts into the organizational pattern known presently as the Indian River School District, an informal survey of the elementary and junior high curricula, done by district staff, revealed that there were many areas in science and social studies in which there were overlaps in instruction, as well as serious voids. Further studies indicated that the science and social studies also provided the least materials and opportunities for a child to be taught on his instructional level. Inventories also indicated that because of the wide diversification required of an elementary teacher, equipment and materials for science and social studies were limited and lacked quality.

District workshops then determined several other needs built around the social studies and science curricula. Few opportunities were possible for the elementary teacher to incorporate special units of particular interest to district students. Particular teachers had their own special units at times, but each class and each school were having different areas of study emphasized.

It became apparent that high priority should be given to making the social studies and science curricula more relevant to the particular needs of the students. Also, it became obvious that there should be some way of providing this in high impact units that would contain the definite behavioral objectives desired. With these factors in mind, the "Mobile Teacher Program" was conceived. It was seen not only as an answer to the district's particular needs, but as a possible solution to problems indentified in many areas of education.

III. SPECIFIC PURPOSES OF THE PROJECT (FY '73)

A. The objectives of the "Mobile Teacher Program": for FY '73 were as follows:

1. Sixth grade students in social studies and science skills will increase in achievement (1) an average of one grade level on a nationally standardized

test compared to previous sixth grade students who did not have such a program and (2) an average of 20% on teacher-made tests given on a pre and post basis.

2. Teachers in the program will continue to demonstrate the following teaching techniques and strategies:
   a. Use of multi-media materials and equipment
   b. Directed inquiry and discovery techniques
   c. Pupil-teacher planning
   d. Establishment of measurable objectives for the units of instruction
   e. Evaluation of student progress in terms of the established objectives
   f. Emphasis on skill development in science and social studies
   g. Varied grouping and instructional patterns
   h. Greater pupil involvement in learning through active participation

IV. DESCRIPTION OF THE PROJECT (FY '73)

A. The procedures and activities selected for achieving the stated objectives are built around the concept of rotating and specializing the sixth grade teachers of social studies and science in the four elementary schools in the Indian River School Districts that house sixth grade students.

A study of related literature indentified several national objectives relevant to the district situation. These included (1) using interdisciplinary approaches in relation to basic content matter; (2) increasing specific skills and concepts essential to social studies and science such as process skills, map skills, and communication skills; (3) involving students in related programs outside the school where they can apply or adapt the learning received in the instructional program; (4) providing more experiences and materials related to the wide ranges in ability and achievement; and (5) improving the quality of teacher planning and instruction.

Accomplishment of the above objectives is built around a unique rotating staff pattern. Eight teachers, four social studies and four science, are equipped for nine weeks of instruction in a specific subject area. The teachers rotate from school to school four times during the year. The program is not only built around the general objectives listed previously, but focuses on specific behavioral objectivies for each unit with apporpriate methods for evaluating each objective stated.

A strong point of the program is that each teacher can, based on evaluation, adjust his unit every nine weeks rather than once a year. In conjunction with

this, local resource people, state and federal agencies, and various staff members are involved in the planning of coordinated activities.

B. The "Mobile Teacher Program" includes the following social studies units:

1. Egypt
2. Mexico
3. Western Europe
4. Map and Globe Skills

Each of these units is taught for a nine week period by one teacher in the four elementary schools in the Indian River School District housing sixth grade students.

The program also includes the following science units which are taught in the same manner as the social studies units:

1. Chemistry and Prehistoric Life
2. Electricity and Magnetism
3. Light and Sound Energy
4. Space and Oceanography

The facilities for the program are those classrooms used previously for sixth grade students in the Georgetown Elementary School, East Millsboro Elementary School, Lord Baltimore Elementary School, and Selbyville Middle School.

C. Personnel involved in the operation of the "Mobile Teacher Program" are:

Mr. Phillip Slacum, Assistant Superintendent
Indian River School District

Mr. Jack Hallman, Director of Curriculum
Indian River School District

Mr. Ralph Mahan, Supervisor of Science
Indian River School District

Mrs. Mary Phillips, Supervisor of Social Studies
Indian River School District

Mrs. Irene Graham, Federal Projects Coordinator
Indian River School District

Mrs. Martha Joines, Elementary Principal
Indian River School District

Mr. Edward Burton, Elementary Principal
Indian River School District

Mr. Don Ward, Elementary Principal
Indian River School District

Mr. Everett Toomey, Middle School Principal
Indian River School District

Mr. Byron Phillips, Elementary Principal
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Mr. James Blackwell, Social Studies Teacher
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Mrs. Jean Slacum, Social Studies Teacher
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Mrs. Joanne Stephens, Social Studies Teacher
Indian River School District

Mr. Thomas Timmons, Social Studies Teacher
Indian River School Distirct

Mr. Alex Kansak, Science Teacher
Indian River School District

Mrs. Martha Little, Science Teacher
Indian River School District

Mrs. Shirley Scott, Science Teacher
Indian River School District

Mr. Alphonso Stevenson, Science Teacher
Indian River School District

The teachers were regular sixth grade teachers in the Indian River School District prior to the beginning of the project.

V. EVALUATION METHODOLOGY

A. The evaluation of the "Mobile Teacher Program" was conducted through the office of Mrs. Evalyn Hickman, Supervisor of Guidance and Psychological Services, Indian River School District. The Metropolitan Achievement Test was used to determine growth in science and social studies skills.

B. The major focus of the project was on increasing science and social studies skills an average of one grade level on a nationally standardized test compared to students who did not have such a program in sixth grade.

C. The data was collected by using the science and social studies subtests of the Metropolitan Achievement Test, Intermediate Form F. The data was collected twice during the 1972-73 school year. The Metropolitan Achievement Test was administered to all sixth grade students in September, 1972, and again to a random sample group in May, 1973. The data was collected by teachers and by the project director.

D. The Metropolitan Achievement Test was given on a pre and post basis and the gain reported for each building. A district wide post-test equivalent mean was then determined, as well as a district mean gain.

VI. RESULTS

A. Science Subtest Metropolitan Achievement Test, Intermediate, Form F

1. The district pre-test grade equivalent mean was 5.81. The building pre-test grade equivalent mean ranged from 4.99 in building C to 7.12 in building B.

2. The district post-test grade equivalent mean was 6.52. The building post-test grade equivalent means ranged from 5.51 in building C to 8.11 in building B.

3. The district grade equivalent mean on the post-test indicated a gain of .71 or slightly more than a year's growth.

4. Individual building post-test grade equivalent means indicated a gain range of .48 in building D. to .99 in building B with the same type of treatment.

Building	Pre-test	Post-test	Gain
A	5.97	6.82	.85
B	7.12	8.11	.99
C	4.99	5.51	.52
D	5.14	5.62	.48
District	5.81	6.52	.71

B. Social Studies Subtest Metropolitan Achievement Test, Intermediate, Form F

1. The district pre-test grade equivalent mean was 5.83. The building pre-test grade equivalent means ranged from 4.76 in building C to 7.68 in Building B.
2. The district post-test grade equivalent mean was 6.31. The building post-test grade equivalent means ranged from 4.91 in building C to 8.39 in building B.
3. The district grade equivalent mean on the post-test indicated a gain of .48 for the stipulated treatment period.
4. Individual building post-test grade equivalent means indicated a gain range of .15 in building C to .71 in building B with the same type of treatment.

Building	Pre-test	Post-test	Gain
A	5.91	6.47	.56
B	7.68	8.39	.71
C	4.76	4.91	.15
D.	4.97	5.46	.49
District	5.83	6.31	.48

VII. DISCUSSION

A. The project design stipulated a comparison between the scores of students in the sixth grade who did have such a program and those who did not. This is a rather meaningless comparison since, there was no actual control group. Because of this the two means of comparison available are both unsatisfactory. Present district scores can be compared to scores in other districts with similar social and economic factors, but this would not be a valid comparison. The second method is to compare present scores with scores of sixth grade students in this district prior to the initiation of the program. This method does not offer the comparison needed because the Metropolitan Achievement Tests given prior to the program were of a different form and only given in three of the four elementary schools in the Indian River School District.

A comparison can be drawn between the district grade equivalent mean gains of the first two years of the project and the third year. The district science grade equivalent mean gain the first year was .53, the second year 1.05 and .71 the third year. The district social studies grade equivalent mean gain the first year was .20, the second year .78, and .48 the third year.

B. Since a nationally standardized test was used as the major evaluation instrument for the program, there should not be any factors that may have biased or influenced the results of the evaluation.

C. One of the objectives of the program reads as follows: Sixth grade students in social studies and science skills will increase in achievement (1) an average of one grade level on a nationally standardized test compared to previous sixth grade students who did not have such a program and (2) an average of 20% on teacher-made tests given on a pre and post basis.

It has been stated previously that the comparison listed in #1 above is almost impossible. A type of comparison was indicated, however, in the previous section (A) of this category of the report.

D. The results of the evaluation indicate that the program students did increase in science and social studies skills. The increase in achievement was not as much as had been anticipated. It is hoped that with minor changes which are discussed later the increase in skills will improve.

VIII. CONCLUSIONS AND RECOMMENDATIONS

A. The major findings in the area of science skills were:

1. The district pre-test grade equivalent mean was 5.81. The building pre-test grade equivalent means ranged from 4.99 in building C to 7.12 in building B.
2. The district post-test grade equivalent mean was 6.52. The building post-test grade equivalent means ranged from 5.51 in building C to 8.11 in building B.
3. The district grade equivalent mean on the post-test indicated a gain of .71.
4. Individual building post-test grade equivalent mean indicated a gain range of .48 in building D to .99 in building B with the same type of treatment.

The major findings in the area of social studies skills were:

1. The district pre-test grade equivalent mean was 5.83. The building pre-test grade equivalent means ranged from 4.76 in building C to 7.68 in building B.
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3. The district grade equivalent mean on the post-test indicated a gain of .48 for the stipulated treatment period.
4. Individual building post-test grade equivalent means indicated a gain range of .15 in building C to .71 in building B with the same type of treatment.

B. A comparison of gains made during the first and second year of the program with those made during the third year yields the following:
   1. The district science grade equivalent mean gain the first year was .53, the second year 1.05 and .71 the third year.
   2. The district social studies grade equivalent mean gain the first year was .20, .78 the second year and .48 the third year.

C. The data collected in the "Mobile Teacher Program" over a three year period shows inconclusive results. The gains in most cases did not meet the expectations. Few variables can be found to explain the decrease in gain the third year of the program. The gain in science the third year was lower than the second year but was higher than the first year. In social studies the gain the third year was lower than the second year but significantly higher than the first year.

One of the negative points of the program seems to be the difficulty of establishing a strong student teacher relationship in the nine week period that each teacher is with the students, however the program does seem to have merit. In view of these two considerations, it is recommended that the teachers remain stationary and the materials and units rotate during the 1973-74 year. It is hoped that by so doing the positive part of the program will be strengthened without weakening any part of it.

IX. SUMMARY

A. The objectives of the "Mobile Teacher Program" for FY '73 were as follows:

1. Sixth grade students in social studies and science skills will increase in achievement (1) an average of one grade level on a nationally standardized test compared to previous sixth grade students who did not have such a program and (2) an average of 20% on teacher-made tests given on a pre and post basis.

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g. Varied grouping and instructional patterns

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B. The procedures and activities selected for achieving the stated objectives are built around the concept of rotating and specializing the sixth grade teachers of

social studies and science in the four elementary schools in the Indian River School District that house sixth grade students.

A study of related literature identified several national objectives relevant to the district situation. These included (1) using interdisciplinary approaches in relation to basic content matter; (2) increasing specific skills and concepts essential to social studies and science such as process skills, map skills, and communication skills; (3) involving students in related programs outside the school where they can apply or adapt the learning received in the instructional program; (4) providing more experiences and materials related to the wide ranges in ability and achievement; and (5) improving the quality of teacher planning and instruction.

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F. The major focus of the project was on increasing science and social studies skills an average of one grade level on a nationally standardized test compared to students who did not have such a program in sixth grade.

G. The data was collected by using the science and social studies subtests of the Metropolitan Achievement Test, Intermediate Form F. The data was collected twice during the 1972-73 school year. The Metropolitan Achievement Test was administered to all sixth grade students in September, 1972, and again to a random sample group in May, 1973. The data was collected by teachers and by the project director.

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2. The district social studies grade equivalent mean gain the first year was.20, the second year .78, and the third year .48.

K. It is recommended that the teachers remain stationary and the materials and units rotate between the four schools involved during the 1973-74 school year.